

2. Intrapersonal communication

2.1 Definitions

Although successful communication is generally defined as being between two or more individuals, issues concerning the useful nature of intrapersonal communication made some argue that this definition is too narrow.

In *Communication: The Social Matrix of Psychiatry*, Jurgen Ruesch and Gregory Bateson argue that intrapersonal communication is indeed a special case of interpersonal communication, as "dialogue is the foundation for all discourse."

Intrapersonal communication can encompass:

Speaking aloud (talking to oneself), reading aloud, repeating what one hears; the additional activities of speaking and hearing (in the third case of hearing again) what one thinks, reads or hears may increase concentration and retention. This is considered normal, and the extent to which it occurs varies from person to person. The time when there should be concern is when talking to oneself occurs outside of socially acceptable situations.

Internal monologue, the semi-constant internal monologue one has with oneself at a conscious or semi-conscious level.

Writing (by hand, or with a word processor, etc.) one's thoughts or observations: the additional activities, on top of thinking, of writing and reading back may again increase self-understanding ("How do I know what I mean until I see what I say?") and concentration. It aids ordering one's thoughts; in addition it produces a record that can be used later again. Copying text to aid memorizing, and note taking also falls in this category. Writing need not be limited to words in a natural or even formal language. Doodling also falls into this category. Children may be communicating intrapersonally when they doodle and adults sometimes argue that they do...

Making gestures while thinking: the additional activity, on top of thinking, of body motions, may again increase concentration, assist in problem solving, and assist memory. Again, routinely observed in children, the equivalent of doodling without writing. Everyday images are transformed by gestures that form a new lens through which to view the images.

Sense-making (see Karl Weick) e.g. interpreting maps, texts, signs, and symbols

Interpreting non-verbal communication (see Albert Mehrabian) e.g. gestures, eye contact

Communication between body parts; e.g. "My stomach is telling me it's time for lunch."

2.2 Mechanisms

Our ability to talk to ourselves and think in words is a major part of the human experience of consciousness. From an early age, individuals are encouraged by society to introspect carefully, but also to communicate the results of that introspection. Simon Jones and Charles Fernyhough cite research suggesting that our ability to talk to ourselves is very similar to regular speech. This theory originates with the developmental psychologist Lev Vygotsky, who observed that children will often narrate their actions out loud before eventually replacing the habit with the adult equivalent: sub-vocal articulation. During sub-vocal articulation, no sound is made but the mouth still moves. Eventually, adults may learn to inhibit their mouth movements, although they still experience the words as "inner speech".

Jones and Fernyhough cite other evidence for this hypothesis that inner speech is essentially like any other action. They mention that schizophrenics suffering auditory verbal hallucinations (AVH) need only open their mouths in order to disrupt the voices in their heads. To try and explain more about how inner speech works, but also what goes wrong with AVH patients, Jones and Fernyhough adapt what is known as the "forward model" of motor control, which uses the idea of "efferent copies".

A forward model of motor control. Notice that a prediction of the future state is made just before the movement occurs. Presumably that efference copy is used to establish agency.

In a forward model of motor control, the mind generates movement unconsciously. While information is sent to the necessary body parts, the mind basically faxes a copy of that same information to other areas of the brain. This "efferent" copy could then be used to make predictions about upcoming movements. If the actual sensations match predictions, we experience the feeling of agency. If there is a mismatch between the body and its predicted position, perhaps due to obstructions or other cognitive disruption, no feeling of agency occurs.

Jones and Fernyhough believe that the forward model might explain AVH and inner speech. Perhaps, if inner speech is a normal action, then the malfunction in

schizophrenic patients is not the fact that actions (i.e. voices) are occurring at all. Instead, it may be that they are experiencing normal, inner speech, but the generation of the predictive efferent copy is malfunctioning. Without an efferent copy, motor commands are judged as alien (i.e. one does not feel like they caused the action). This could also explain why an open mouth stops the experience of alien voices: When the patient opens their mouth, the inner speech motor movements are not planned in the first place.

2.3 Evolved to avoid people

Joseph Jordania suggested that talking to oneself can be used to avoid silence. According to him, the ancestors of humans, like many other social animals, used contact calls to maintain constant contact with the members of the group, and a signal of danger was communicated through becoming silent and freezing. Because of the human evolutionary history, prolonged silence is perceived as a sign of danger and triggers a feeling of uneasiness and fear. According to Jordania, talking to oneself is only one of the ways to fill in prolonged gaps of silence in humans. Other ways of filling in prolonged silence are humming, whistling, finger drumming, or having TV, radio or music on all the time.

2.4 Criticism of the concept

In 1992, a chapter in *Communication Yearbook #15*, argued that "intrapersonal communication" is a flawed concept. The chapter first itemized the various definitions. Intrapersonal communication, it appears, arises from a series of logical and linguistic improprieties. The descriptor itself, 'intrapersonal communication' is ambiguous: many definitions appear to be circular since they borrow, apply and thereby distort conceptual features (e.g., sender, receiver, message, dialogue) drawn from normal inter-person communication; unknown entities or person-parts allegedly conduct the 'intrapersonal' exchange; in many cases, a very private language is posited which, upon analysis, turns out to be totally inaccessible and ultimately indefensible. In general, intrapersonal communication appears to arise from the tendency to interpret the inner mental processes that precede and accompany our communicative behaviors as if they too were yet another kind of communication process. The overall point is that this reconstruction of our inner mental processes in the language and idioms of everyday public conversation is highly questionable, tenuous at best.

2.5 Other viewpoints

Dr. Sian Beilock, cognitive psychology professor at the University of Chicago, presents several techniques in her book *Choke*, that could offer help to anyone facing a challenging situation and struggling with mental chatter. It has been widely accepted that speaking in front of a crowd causes people considerable stress. Dr. Beilock suggests that practicing in front of family or friends does not help overcome this fear. She states that these so-called "friendly faces" can cause the person to become more self-conscious which can lead to the possibility of further choking. The elevated motivation to please parents or friends is what she theorizes causes brain functions to freeze. Since self talk is a form of self-regulation, parents or instructors could use this technique to help focus a young student's inner dialog towards a process goal instead of an outcome based goal. When applied in an educational psychology classroom scenario, teachers can instruct students to focus on presentation material ignoring consequences, expectations, and/or the attempt to impress instructors or classmates.

2.6 Body language

Body language refers to various forms of nonverbal communication, wherein a person may reveal clues as to some unspoken intention or feeling through their physical behavior. These behaviors can include body posture, gestures, facial expressions, and eye movements. Body language also varies depending on the culture and most behaviors are not universally accepted. Although this article focuses on interpretations of human body language, also animals use body language as a communication mechanism. Body language is typically subconscious behavior, and is therefore considered distinct from sign language, which is a fully conscious and intentional act of communication.

Body language may provide clues as to the attitude or state of mind of a person. For example, it may indicate aggression, attentiveness, boredom, a relaxed state, pleasure, amusement, and intoxication.

Body language is significant to communication and relationships. It is relevant to management and leadership in business and also in places where it can be observed by many people. It can also be relevant to some outside of the workplace. It is commonly helpful in dating, mating, in family settings, and parenting. Although body language is non-verbal or non-spoken, it can reveal much about your feelings and meaning to others and how others reveal their feelings toward you. Body language signals happen on both a conscious and unconscious level.¹

2.6.1 Understanding

The technique of "reading" people is used frequently. For example, the idea of mirroring body language to put people at ease is commonly recommended for people that want to befriend someone new. For example, when they smile you can smile, when they lean back, you can lean back. You can also match someone over the phone. For example, you can call someone on the phone listen to the way they say, "Hello." and match the voice tone, volume, tempo and speaking rate in your immediate response to them. Just a brief moment of matching can build rapport as long as your motivation is positive and not manipulative. Body language can show someone's true feelings. If you mirror someone's body language it can indicate to them you understand them. It is important to note that some markers of emotion (e.g. smiling/laughing when happy, frowning/crying when sad) are largely universal, however in the 1990s Paul Ekman expanded his list of basic emotions, including a range of positive and negative emotions, not all of which are encoded in facial muscles. The newly included emotions are:

A study in body language.

1. Amusement
2. Contempt
3. Contentment
4. Embarrassment
5. Excitement
6. Guilt
7. Pride in achievement
8. Relief
9. Satisfaction
10. Sensory pleasure
11. Shame

Body language signals may have a goal other than communication. People would keep both these two in mind. Observers limit the weight they place on non-verbal cues. Signalers clarify their signals to indicate the biological origin of their actions.

Verbal communication also requires body language to show that the person you are talking with that you are listening. These signals can consist of; eye contact and nodding your head to show you understand. More examples would include yawning (sleepiness), showing lack of interest (sexual interest/survival interest), attempts to change the topic (fight or flight drivers). Rudolf Laban and Warren Lamb add much to this about dancers. Mime artists utilize these techniques to communicate entire shows without a single word.

2.6.2 Physical expression

Physical expressions like waving, pointing, touching and slouching are all forms of nonverbal communication. The study of body movement and expression is known as kinesics. Humans move their bodies when communicating because, as research has shown, it helps "ease the mental effort when communication is difficult." Physical expressions reveal many things about the person using them. For example, gestures can emphasize a point or relay a message, posture can reveal boredom or great interest, and touch can convey encouragement or caution.^[3]

A chess player in deep concentration

. One of the most basic and powerful body-language signals is when a person crosses his or her arms across the chest.^[4] This could indicate that a person is putting up an unconscious barrier between themselves and others. However, it can also indicate that the person's arms are cold, which would be clarified by rubbing the arms or huddling. When the overall situation is amicable, it can mean that a person is thinking deeply about what is being discussed, but in a serious or confrontational situation, it can mean that a person is expressing opposition.^[5] This is especially so if the person is leaning away from the speaker. A harsh or blank facial expression often indicates outright hostility.

- Consistent eye contact can indicate that a person is thinking positively of what the speaker is saying. It can also mean that the other person doesn't trust the speaker enough to "take their eyes off" the speaker. Lack of eye contact can indicate negativity. On the other hand, individuals with anxiety disorders are often unable to make eye contact without discomfort. Eye contact can also be a secondary and misleading gesture because cultural norms about it vary widely. If a person is looking at you, but is making the arms-across-chest signal, the eye contact could be indicative that something is bothering the person, and that he wants to talk about it. Or if while making direct eye

contact, a person is fiddling with something, even while directly looking at you, it could indicate that the attention is elsewhere.

- Disbelief is often indicated by averted gaze, or by touching the ear or scratching the chin. When a person is not being convinced by what someone is saying, the attention invariably wanders, and the eyes will stare away for an extended period.
- Boredom is indicated by the head tilting to one side, or by the eyes looking straight at the speaker but becoming slightly unfocused. A head tilt may also indicate a sore neck, trust or a feeling of safety (part of the neck becomes uncovered, hence vulnerable; It's virtually impossible to tilt our head in front of someone we don't trust or are scared of) or Amblyopia, and unfocused eyes may indicate ocular problems in the listener.
- Interest can be indicated through posture or extended eye contact, such as standing and listening properly.
- Excessive blinking, or the absence of blinking, may be an indicator of lying.

Some people use and understand body language differently, interpreting their gestures and facial expressions (or lack thereof) in the context of normal body language usually leads to misunderstandings and misinterpretations (especially if body language is given priority over spoken language). It should also be stated that people from different cultures can interpret body language in different ways. For example, in parts of Italy, a straightened index finger placed in the middle of the cheek and rotated is seen as an indication of praise (Giddens, Duneier, Appelbaum, and Carr 110).

2.6.3 Prevalence of non-verbal communication in humans

James Borg states that human communication consists of 93 percent body language and paralinguistic clues, while only 7 percent of communication consists of words themselves; however, Albert Mehrabian, the researcher whose 1960s work is the source of these statistics, has stated that this is a misunderstanding of the findings (see Misinterpretation of Mehrabian's rule). Albert Mehrabian found "that the verbal component of a face-to-face conversation is less than 35% and that over 65% of communication is done non-verbally". Diagram of Edward T. Hall's personal reaction bubbles (1966), showing radius in feet

The interpretation of body language should not be based on a single gesture. Pease (2004) suggests evaluation should be on three distinct rules: 1) Read gestures in clusters; 2) look for congruence; and 3) read gestures in context.

2.6.4 Proxemics

Introduced by Edward T. Hall in 1966, proxemics is the study of measurable distances between people as they interact with one another. The distance between people in a social situation often discloses information about the type of relationship between the people involved. Proximity may also reveal the type of social setting taking place.

1. Intimate distance ranges from touching to about 18 inches (46 cm) apart, and is reserved for lovers, children, as well as close family members and friends, and also pet animals.
2. Personal distance begins about an arm's length away; starting around 18 inches (46 cm) from the person and ending about 4 feet (122 cm) away. This space is used in conversations with friends, to chat with associates, and in group discussions.
3. Social distance ranges from 4 to 8 feet (1.2 m - 2.4 m) away from the person and is reserved for strangers, newly formed groups, and new acquaintances.
4. Public distance includes anything more than 8 feet (2.4 m) away, and is used for speeches, lectures, and theater. Public distance is essentially that range reserved for larger audiences.

Proximity range varies with culture.

2.6.5 Unintentional gestures

Beginning in the 1960s, there has been huge interest in studying human behavioral clues that could be useful for developing an interactive and adaptive human-machine system. Unintentional human gestures such as making an eye rub, a chin rest, a lip touch, a nose itch, a head scratch, an ear scratch, crossing arms, and a finger lock have been found conveying some useful information in specific contexts. In poker games, such gestures are referred to as "tells" and are useful to players for detecting deception clues or behavioral patterns in opponents.